



RMD 212BT MANUAL

• GB •

Contents

Warnings Before Installation.....	3-5
Before You Install.....	6
Installation (DIN Front Mount).....	7
Installation (Vehicle's Brackets).....	8
Wiring Connections.....	9
Control of the Unit.....	10
Bluetooth Operation.....	11
Basic Operation.....	12
Radio Operation.....	13
RDS Operation.....	14
USB/SD Operation.....	15
Simple Troubleshooting Guide.....	16
Specifications.....	16

Welcome!

Thank you for purchasing this high-technology car stereo with USB, SD/MMC control. This unit can encode and record songs and radio programmes to your USB Flash disk or SD/MMC card. If there is any compatibility problems, we recommend you to format your flashdisk/storage card in FAT32 mode before using it. If the problem persists, kindly consult your dealer for assistance.

Warnings Before Installation

Important Warnings to Take Note of BEFORE Commencing Installation

Damage Caused By Incorrect Installation or Usage is NOT Covered By Warranty. PLEASE Take The Time To Read The Installation Notes Carefully.

To Validate The Warranty Please Ensure That The Unit Is Installed By A Professional, VAT Registered Car Audio Installation Company.

- **To avoid shorts in your vehicles electrical system, be sure to disconnect the battery cable before beginning installation.**
- This unit is intended for vehicles with a 12-volt battery and negative grounding. Before installing the unit in a recreational vehicle, truck, or bus, check that the battery voltage is 12 volts.
- **Remove the two transport screws from the top of the unit before installation.**
- **The black lead is ground.** A good chassis ground requires a tight connection to ground. The area should be free from rust, paint or any form of dirt. Please ground this lead separately from the ground of high-current products such as power amps. If you ground the products together and the ground becomes detached, there is a risk of damage to the products or fire.
- Be sure to connect the colour coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or damage the vehicle's electrical system. Cords for this product and those for other products may be different colours even if they have the same function. When connecting this product to another product, refer to the supplied installation manuals of both products and connect cords that have the same function.
- Be sure to connect the negative (-) speaker leads to the negative (-) speaker terminal. Never connect the negative (-) speaker leads to chassis ground.
- The unit is only designed for use with 4 speakers. Do not combine outputs for use with 2 speakers. Do not ground negative speaker leads to the chassis ground.
- Speakers connected to this unit must be high-power units with a minimum rating of 45W and impedance of 4 to 8 ohms. Connecting speakers with output and/or impedance values other than those noted here will result in damage to the head unit

Warnings Before Installation

and the speakers. Check the condition of your speakers carefully- connecting this unit to old or degraded speakers may result in a fault which will damage the audio IC and invalidate the warranty.

- If this unit is installed in a vehicle that does not have an ACC (accessory) position on the ignition switch, the red lead of the unit should be connected to a terminal coupled with ignition switch ON/Off operations. If this is not done, the vehicle battery may be drained when you are away from the vehicle for several hours.
- Secure the wiring with cable clamps or adhesive tape. To protect the wiring, wrap adhesive tape around them where they lie against metal parts. To avoid short-circuiting, cover all disconnected lead with insulating tape. There is a possibility of short-circuiting if the leads are not insulated.
- Route and secure all wiring so it cannot touch any moving parts, such as the gear lever and handbrake. Do not route wiring in places that get hot, such as near the heater outlet. If the insulation of the wiring melts or gets torn, there is a danger of the wiring short-circuiting to the vehicle's body.
- Don't pass the yellow lead through a hole into the engine compartment to connect to the battery. This will damage the lead's insulation and cause a very dangerous short.
- Do not shorten any leads. If you do, the protection circuit may fail to work when it should.
- Never feed power to other equipment by cutting the insulation of the power supply lead of the unit and tapping into the lead. The current capacity of the lead will be exceeded, causing overheating.
- Since a unique audio I/C circuit is employed, never wire so the speaker leads are directly grounded or the left and right – speaker leads are common.
- When this product's source is switched ON, a control signal is outputted through the orange lead. Connect to an external power amp's system remote control or the car's Auto-antenna relay control terminal (max. 300mA 12 V DC). If the car features a glass antenna, connect to the antenna booster power supply terminal.
- When an external power amp is being used with this system, do not connect the orange lead to the amp's power terminal. Likewise, do not connect the orange lead to the power terminal of the auto-antenna. Such connection could cause excessive current drain and a major malfunction. Refer to the relevant owner's manual

Warnings Before Installation

for details on connecting the power amp and other units, then make the connections correctly.

- Do not block any vents or heater panels. Blocking them will cause heat to build up and may result in fire.
- Make sure that the unit has a good chassis ground. A good ground connection will eliminate most electrical noise. A good chassis ground requires a tight connection to the vehicles metal chassis. The area around the ground connection should be clean, bare metal without rust, paint, plastic or dirt for a good electrical connection.
- If noise is still experienced when the motor of the vehicle accelerates, a choke should be placed in line with the power to the unit. The installation company will know what is required.
- When replacing the fuse(s) the replacement must be of the same amperage as shown on the fuse holder. Never replace a fuse with another of a different value. If the fuse blows again please contact your installation company.
- Do not block vents or heater panels. Blocking them will cause heat to build up inside and may result in fire.
- Double check that all wiring and connections are correct before reconnecting the battery and turning on the unit.
- After completing the installation and before operating the unit, reconnect the battery, Then press the (RES) button with a pointed object, such as a ball-point pen to set the unit to its initial status. After pushing the button, wait a few seconds for the red light to flash.

Tools for Installation

- 2 removal wrenches are supplied for taking out the old unit and place with this brand name car radio. The following tools and supplies may also be needed for the installation:

Tools for Installation:

- Philips Screw-drivers
- Wire Stripper
- Wire Cutter
- Hammer
- Pencil
- Electrical Tape
- Electric Drill

Supplies for Installation:

- Machine Screws
- Crimp Connectors
- 14 Gauge Wire for Power Connections
- 14-16 Gauge Speaker Wires
- * The above are not supplied.

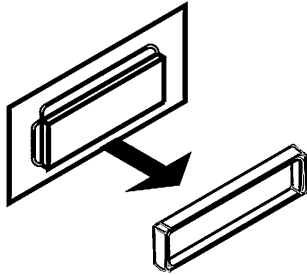
Before You Install

Automotive audio equipment installations can be troublesome at times, even to the most experienced of installation technicians. If you are not confident working with electrical wiring, removing and reinstalling interior panels, carpeting, dashboards or other components of your vehicle, please call your dealer in order to have the unit professionally installed.

IMPORTANT: Remove the two transport screws from the top of the unit before installing.

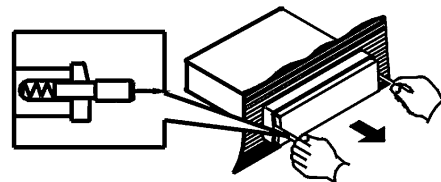
1. Remove the Old Unit from the Dashboard

1. Remove the outer trim frame.



DIN Front Mount

2. Insert the keys supplied with the old unit into both sides of the unit as shown in figure below until they click. Pull to remove the old unit from the dashboard.



**DO NOT DISCONNECT WIRES
AT THIS TIME!**

2. Mark Polarity of the Speaker Wires

Marking the polarity of the speaker wires will make it easier to connect the existing speakers to your car radio. Consult wiring diagram of existing head unit before disconnecting any wires. If you are not positive of the polarity of the existing wires from the speakers to the head unit, install new wires.

1. While the old unit is playing, disconnect the wires from one speaker
2. Take a length of masking tape and fold it around the wire so it forms a flag.
3. On the masking tape mark the polarity of the speaker wires (+ & -), as well as left or right, and front or rear.
4. Double check that you marked the first speaker correctly by checking that the speaker wires are the same at the head unit.
5. Repeat this procedure for all of the speakers.
6. Mark the power, ground, and any other wires also.

Installation

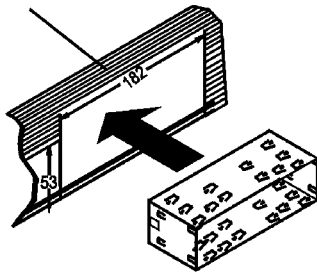
WARNING!

Disconnect negative battery terminal from battery before starting installation. Consult the vehicle's owner's manual for proper instructions.

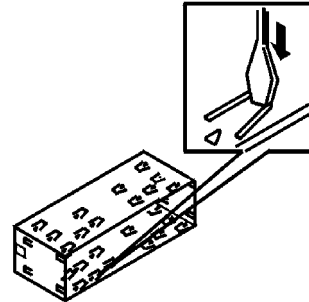
NOTE: Mark the polarity of the existing speaker wires before disconnecting battery.

NOTE: Remove the two transport screws from the top of the unit before installing.

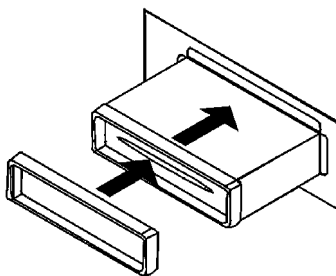
DIN Front Mount



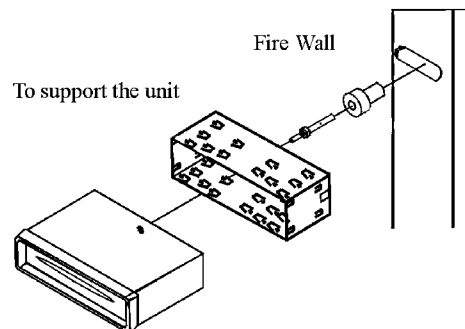
1. After removing the old radio and mounting sleeve, insert supplied mounting sleeve into opening.



2. Bend the tabs on the mounting sleeve to keep the mounting sleeve firmly in place.



3. Attach wires from the unit to existing wires. See wiring connections diagram. Insert radio into dashboard. Then apply the trim frame to outside of radio.



4. Support radio using supplied rear mounting bolt and steel bar. See parts list.

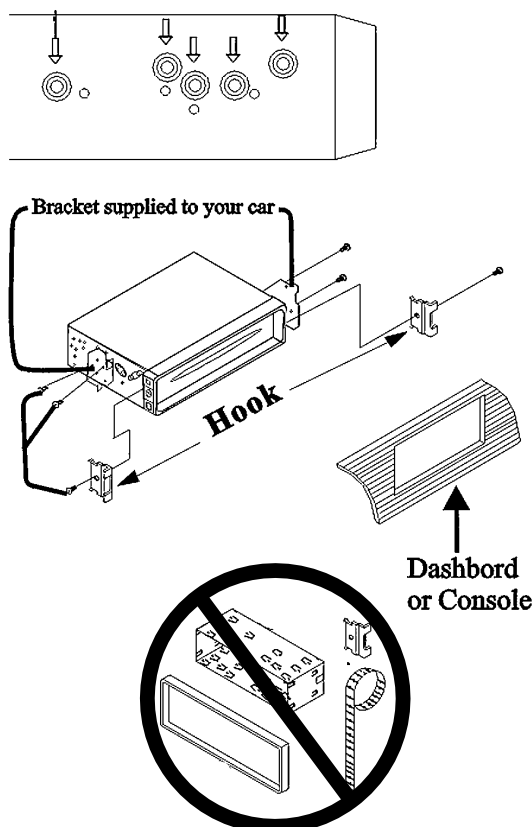
Installation

NOTE: Outer trim frame, hook, and mounting sleeve are not used for this installation.

This is only intended as a general guide; contact the vehicle's manufacturer for specific instructions.

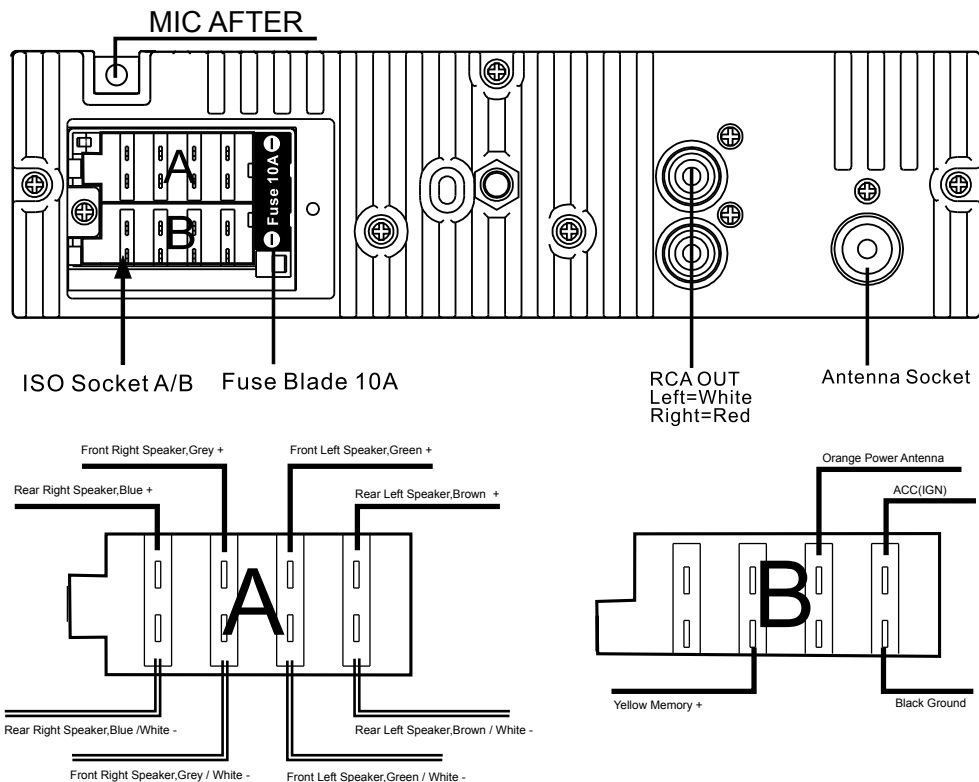
This method of installation uses the screw holes at the sides of the unit and the holes of the existing vehicle mounting bracket.

1. Remove the hooks on both sides.
2. Align the screw holes of the mounting bracket supplied with the car and the screw holes of the main unit. Tighten the 2 screws on each side of the unit. Then fasten the brackets to the car.
3. Attach wires of the unit to existing speaker wires. See wiring diagram.



Wiring Connections

Make sure that you have a good chassis ground. Good ground connections will eliminate most electrical noise problems. A good chassis ground requires a tight connection to the vehicle's metal chassis. The area around the ground connection should be clean, bare metal without rust, paint, plastic, dust, or dirt for a good electrical connection.



Speaker Wiring Notes

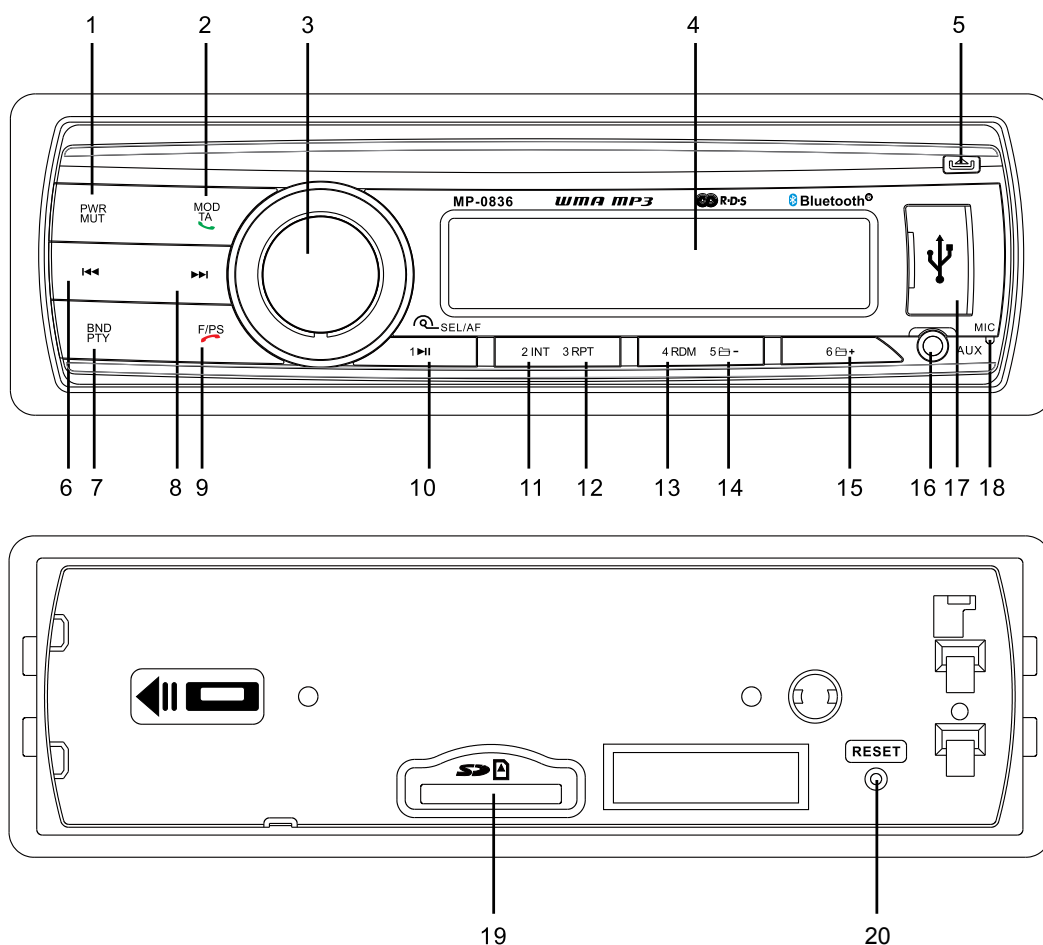
Follow the above wiring diagram to install the head unit with new or existing speakers.

- This unit is designed for use with four (4) speakers with an impedance between 4 Ohms to 8 Ohms.
- An impedance load of less than 4 Ohms could damage the unit.

- Never bridge or combine the speaker wire outputs. When not using four speakers, use electrical tape to tape the ends of the unused speaker outputs to prevent a short circuit.

- Never ground the negative speaker terminals to chassis ground.

Controls of the Unit



1. Power on / off / Mute
2. Mode Select / TA / Answer Button
3. Sound Select / Volume +/-
4. LCD Screen
5. Release Panel Button
6. Previous Track / Backward Button
7. Band Switch / PTY
8. Next Track / Fast Forward Button
9. Auto Preset Scan / Reject Button
10. Number 1 / Play / Pause

11. Number 2 / Introduction
12. Number 3 / Repeat
13. Number 4 / Random
14. Number 5 / Folder Down
15. Number 6 / Folder Up
16. Aux input Jack
17. USB Slot
18. MIC Receiver
19. SD Card Slot
20. Reset Button

Bluetooth Operation

1. Pairing

Press and hold the BAND/ID3/TEL button until the word "BT PAIR" blinks on the display waiting for the bluetooth device to connect.

At this blinking time, please run the bluetooth search and connect function in your cellphone. The car radio model no "BT car stereo" will be shown on the cellphone. Select this car radio and connect. When you are asked for a connection password, please input "0000" in your cellphone to finish the pairing. The bluetooth icon on the display will be on indicating that the connection is established. Bluetooth function is ready to use.

2. Calling

In any play mode, dial the desired number on your cellphone. The unit will switch to bluetooth handsfree mode automatically. "CALL OUT" will be shown on the display indicating the dialling is in progress.

3. Accepting Calls

When there is incoming call, "CALL IN" will be shown on the display indicating there is phone call to answer. "BT TALK" will be shown after the

"ANSWER" button is pressed. Rotate the volume knob during ringing or conversation to adjust the respective volume level.

4. Rejecting Calls

During ringing or conversation, press the "EJECT" button to end the call or reject the call. "END CALL" will be shown on the display and the unit will resume to the original play mode.

5. BT Audio (A2DP)

Press MOD/(with green phone logo) button until the unit entered BT MUSIC. BT audio will play automatically when you play the song in the cellphone. You could pause by "▶||" button, to choose previous or next song by pressing |<< and >>| button.

6. Disconnecting

Disconnect the paired phone by operating on the cellphone. You cannot process disconnection on the car radio headunit.

Basic Operation

1. Tuning the unit On / Off

Press POWER button to turn the unit on. Press again to turn the unit off.

2. Mode Selection

Press the MODE button to cycle through different play modes.

3. Loudness Control

Press the SEL Button repeatedly until the display shows "LOUD ON" or "LOUD OFF". Rotate the VOL button to adjust. When "LOUD ON" shown on the display indicates that loudness function is on.

4. Mute Control

Press the MUTE Button to activate the Mute function. Press the button again to cancel.

5. Volume

Rotate the VOL Button to adjust the volume level. Turn the button clockwise to increase the volume, and vice versa. The larger the number of volume, the higher the volume level.

6. Bass

Press the SEL Button repeatedly until the display shows "BAS". Rotate the VOL button to adjust. When DSP is ON, bass control is not available.

7. Treble

Press SEL Button repeatedly until the display shows "TRE". Rotate the VOL Button to adjust. When DSP is ON, treble control is not available.

8. Balance

Press SEL Button repeatedly until the display shows "BAL", then Rotate the VOL Button to adjust the balance between the left & right speakers. When "L=R" is shown on the screen, it indicates that the balance is 0.

9. Fader

Press SEL Button repeatedly until the display shows "FAD", Rotate the VOL Button to adjust the balance between

the front & rear speakers. When "F=R" is shown on the screen, it indicates that the fader is 0.

10. Preset Equalizer Function

Press SEL Button until the display shows "EQ", then use button to choose the EQ sound effects. The Sequence of equalizer setting will be as follows:
FLAT-ROCK-POP-CLASS

11. Beep Function

Press SEL button repeatedly until the "BEEP" shown on the screen. Rotate the VOL Button to choose "BEEP OFF" or "BEEP ON". "BEEP OFF" means Beep function is inactive. "BEEP ON" means beep sound will be heard when any button pressed.

12. Preset Volume

Press and hold the SEL Button for 2 seconds, the "TA ALLARM" will be shown on the screen. Press the SEL Button repeatedly until the "P-VOL" shown on the screen. Rotate the VOL Button to choose the volume level which will be kept as preset when the unit is turned on.

13. Clock

Press and hold CLK Button, the clock will show on the display. Then press and hold the button until the hours blinks on the display, rotate the SEL knob to set hours, then press the SEL Button until the minutes blinks and rotate the SEL knob to set. Press the CLK Button to confirm.

Radio Operation

1. Choose Radio Band

Press the BND Button anytime to access the radio function.

The unit comes with five bands- three FM Bands (FM1, FM2, and FM3) and two AM Bands (AM1, and AM2). Each of the five bands can store up to six preset stations, for a total of 30 preset memory stations.

2. Radio Tune / Seek Function

In Radio Mode, turn the ">>|" or "|<<" once, the radio frequency will proceed by one step.

Press and hold the SEEK |<< or >>| Button for 2 seconds and the radio will seek the next strong and clear frequency station. Repeat to seek more stations in your listening area with a strong signal.

3. Mono / Stereo Reception Control

In FM radio mode, Press SEL Button repeatedly until the display shows 'MONO' or 'STEREO'. Rotate the Vol button to choose the reception control, the word "MONO" shown on the screen indicating the mono reception is received.

4. Save Your Preset Stations

There are six numbered preset buttons which can store and recall stations for each band. While listening to a radio station you would like to save as a pre-set, press and hold one of the buttons numbered 1-6 until the preset station number is shown. The button you pressed is now the pre-set button for that station.

5. Automatic Store / Preset Scan

A. Automatic Scan & Store

While listening to the FM Radio, press and hold the F/PS Button for 3 seconds. The receiver will automatically scan and save the station listening to.

While listening to the AM Radio, press and the F/PS Button for 3 seconds. The receiver will automatically scan and save the station you are listening to.

B. Scan Saved Stations

Press the F/PS button once to perform the scanning functions. In FM mode, press the F/PS button and the stations in that FM band will be scanned; press the button in AM mode and scan the band stations of that AM Band.

6. Local / DX

Press SEL Button repeatedly until the display shown "LOC". Rotate the VOL button to choose "LOC ON" or "LOC OFF".

a. "LOC ON" showing on the display, means local reception is turned on;

b. "LOC OFF" showing on the display, means distant reception is turned on. Local and distance reception setting can facilitate the radio reception, depending on the location in which the radio is being used.

7. Resetting The Unit

When the unit is off, press and hold MOD+BND button for 3 seconds. The unit will reset itself and all the previous saved radio stations will be cleared.

RDS Operation

1. AF-ALTERNATIVE FREQUENCY

Press and hold the volume button so that the unit will choose the strongest FM signal for the selected station, so that you do not have to re-tune the stations when driving between different transmitter coverage areas. When AF is on, it means RDS information is received; when AF is flashing, it means RDS information is not yet received.

2. TA - TRAFFIC ANNOUNCEMENT

Press and hold the TA button so that the unit will be activated for reception of traffic announcement from local radio stations.

To choose the TA mode, press the sound select button for 2 seconds, the display will show TA SEEK. Rotate the encoder volume to choose between the TA SEEK and TA ALARM, after choosing, please leave the unit idle for the mode to activate. In TA SEEK mode, the unit will seek for traffic announcement programme when TA is pressed; in TA ALARM mode, no TA/TP is displayed and the alarm is set off.

3. PTY - PROGRAMME TYPE

This radio will allow you to select the type of programme required, and will search for a station broadcasting that type of programme. Press and hold the PTY button once to show the music type. Then press 1-6 button to choose the different music types available.

Press the PTY button twice to show the speech type programme. Then press 1-6 button to choose the different speech type programme. Each number key will show 3 different speech programme for you to choose.

4. MASK DPI - MASK ALL

Press the sound select button for 2 seconds, the display will show TA SEEK. Press the sound select button again so that the unit will show MASK DPI. Rotate the encoder volume to toggle between MASK DPI and MASK ALL mode. Then leave the unit idle for the mode to take effect. During MASK DPI mode, the unit will mask only the AF which has different PI, this is the default mode; during MASK ALL mode, the unit will mask the AF which has different PI and no RDS signal with high field strength.

5. RETUNE S/L - SHORT/LONG

This function is to set the initial duration of automatic TA Search -- Press and hold the sound select button until "TA SEEK" is shown on the LCD, then press the SEL button to cycle through the menu selections until "RETUNE_S" is shown, use the VOL +/- button to choose "RETUNE_S" or "RETUNE_L". The default is "RETUNE_S".

RDS Operation

RDS-EON CONTROL

This unit is equipped with the latest technology of EON control, so that when you are listening to Radio or CD, if there is any travel announcement from a nearby local station, the radio will already know the frequency of that radio station. Then it will receive the station, turn up the volume, or interrupt the playback of the music for the duration of the announcement. At the end of the announcement the radio will return to its previous state ready for the next announcement.

USB/SD Operation

1. Play MP3 / WMA from USB/SD

Plug the USB or SD card into the USB/SD port. The MP3 and WMA files in the USB or SD card will be played automatically. If there is no MP3 or WMA files in the USB or SD card, "USB PLAY" or "SD/MMC" will be shown on the screen.

2. Play Mode

The USB or SD/MMC mode can be chosen by pressing the MODE button. The "USB PLAY" means it is in USB play mode, while "SD/MMC" means it is in SD play mode.

3. Track / Folder Search

a. Press >>| button once to advance one track, Press |<< button once to go back one track.

b. Press F/PS button once, the track number will be blink on the screen. Rotate the VOL button to select the track number in this fold. Press SEL button to confirm the selection.

4. ID3

The name of the song will be displayed automatically on the screen.

5. Play / pause

When the card/ USB device has been already loaded the playback of the first track starts automatically. Press the "1 PAU" button and the "PAUSE" will be twinkled on the screen.

6. Introduction

Press the "2 INT" button to select the previous part of each song in the card / USB to play. The "INT + Track no." will be shown on the screen, indicating each song will be played for 10 seconds. After the ending of one song, the consequent song will be played for 10 seconds and so on. Press the "2 INT" button to cancel.

7. Repeat

Press the "3 RPT" button to repeat the same song continuously. The "RPT+ Track no." will be shown on the screen, indicating the repeat process

is operating. Press "3 RPT" button to cancel.

8. Random

Press the "4 RDM" button to play all the files in card/ USB in random order. The "RDM + Track no." will be shown on the screen, indicating the songs are arranged in random order. Press "4 RDM" button to cancel.

9. Folder Down

Press the "5 ▢ -" button once to go back one folder.

10. Folder UP

Press the "6 ▢ +" button once to advance one folder.

AUX IN, RCA OUT,

1. Auxiliary Input

The Auxiliary Input Jack is on the front panel. Insert the AUX IN cable's stereo plug into the AUX IN jack on the panel of the unit. Route the other end of the stereo plug to the headphone jack of any external audio device such as walkman and discman. Press the Mode button to choose AUX. Connect any portable audio device such as a DVD player or VCD player to the AUX IN cable. Use the volume control to adjust volume.

2. RCA Output

The RCA Output Jack is on the back of the unit. (Refer to Wiring) This output is for connecting amplifier, equalizer, or other audio component that requires a pre-amp out connection. (Red = Right, White = Left) Follow the manufacturers instructions for the audio component that you are connecting.

Simple Troubleshooting Guide

PROBLEM	CAUSE/SOLUTION
No Power	Check wiring connections. Check and make sure the fuse is not blown. Replace with the proper rating/size fuse.
Some errors occur in the LCD or nothing functions when buttons are pressed.	Press the RESET Button .
Unable to receive stations	Check and make sure the antenna is connected properly.
Poor radio reception	Check and make sure the antenna is the correct length. Make sure the antenna is not broken. If the antenna is broken, replace it. The antenna is poorly grounded. Check and make sure the antenna is grounded at mounting location.
File information shows in LCD but will not play.	If you have files with Digital Rights Management(DRM). Contact the vendor for proper use.

Specifications

GENERAL

Operating Power.....12 Volts DC, Negative Ground
Output Wiring.....Designed for using four speakers only
RCA line out.....low-level outputs - 1000MV
Output Impedance.....Compatible 4 to 8 Ohm Speakers
Fuses.....10 amp
Dimensions.....178mm(W) x 78mm(D) x 51mm (H)
Weight.....0.65 Kg

FM TUNER

Tuning Range.....87.5 - 108 MHz
FM Sensitivity.....12dBu
Stereo Separation @ 1 Khz.....35dB

AM TUNER

Tuning Range.....522-1620 KHz
AM Sensitivity.....30dBu

WWW.CALIBER.NL

CALIBER HEAD OFFICE • The Netherlands • Fax: +31 (0)416 69 90 01 • E-mail: info@caliber.nl